

REMARKS

Applicants have carefully reviewed and considered the Office Action mailed on April 2, 2008, and the references cited therewith.

Claims 1, 27, 28, 29, 30, and 31 are amended; as a result, claims 1-33 are now pending in this application.

Information Disclosure Statement

Applicants submitted an Information Disclosure Statement and a 1449 Form on April 28, 2006. Applicant respectfully requests that initialed copies of the 1449 Form be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

Affirmation of Election

Applicants thank the Examiner for acknowledging the election of May 9, 2007, in which Applicants elected Species III (including claims 1, 6, 7, 12-16, 27-33) without traverse. Claims 2-5, 8-11, and 17-26 are withdrawn as being drawn to a non-elected species.

§102 Rejection of the Claims

Claims 1, 6, 7, 27-30, 32, and 33 were rejected under 35 USC § 102(b) as being anticipated by Lal et al. (U.S. 6,638,249). Nevertheless, the Office has not shown that Lal et al. teach each and every element of the amended claims.

With respect to claims 1, 27, 29, and their respective dependent claims, claims 1, 27, and 29 discuss fluid delivery devices comprising a retaining means, a retaining member, and a fluid retainer (hereinafter "fluid retainer" for simplicity). In the claims, the fluid retainer retains "fluid, delivered out of the fluid reservoir." (Claim 1; *see also* claims 27 and 29). Claims 1, 27, and 29 also indicate that the devices respectively comprise delivering means, a fluid delivery mechanism, and delivery mechanism (hereinafter "delivery mechanism" for simplicity) that deliver "fluid out of the fluid reservoir." (Claim 1; *see also* claims 27 and 29).

While each of these claims (1, 27, and 29) further state that the fluid retainer is separate from the delivery mechanism (*see* Figure 7 for support), the Office has not shown that Lal et al.

teach such a limitation. Indeed, on page 2 of the Office Action, it appears the Office argues that Lal et al. teach a combined “means for delivering fluid out of the fluid reservoir, [and] means for retaining the delivered fluid proximal the ambient environment using a capillary tube 57 and an outer tube 54.”

Upon review of the Lal et al. patent, the skilled artisan would likely find support for the Office’s argument. Specifically, it appears that Lal et al. discuss an ultrasonically driven pump that has a stationary outer needle and an inner needle mounted within the bore of the outer needle. (Abstract). As the inner needle is ultrasonically vibrated, liquid is drawn into the inner needle for discharge through the proximal end of the inner needle. (*Id.*). This pump can be used for atomizing liquid by drawing liquid from a supply that is pumped from the distal end to an open proximal end of the inner needle where the liquid is discharged by atomization into the atmosphere. (*Id.*). Thus, instead of delivering the fluid out the fluid reservoir to separate means for retaining the fluid, it appears that Lal et al. teach directly discharging the liquid by atomization into the atmosphere from the proximal end of the inner needle, through which the liquid was drawn. (*See Id.*).

With respect to claim 28, claim 28 recites “retaining the delivered fluid in a porous pad” and “imparting motion to the porous pad to increase evaporation and dispersion of the fluid.” Nevertheless, the Office has not shown that Lal et al. teach a porous pad or imparting motion to one. Instead, as discussed above, the skilled artisan would likely understand that Lal et al. teach that where the pump is used for atomizing liquid, the liquid is pumped to an open proximal end of the inner needle where the liquid is discharged by atomization into the atmosphere. (*Id.*; see also Col. 2, lines 49-52). Thus, the skilled artisan would likely find that Lal et al. teach atomization directly at the open proximal end of the inner needle as opposed to retaining the delivered fluid in a porous pad and imparting motion to the porous pad to increase evaporation and dispersion of the fluid.

With respect to claim 30, claim 30 recites “a motion element in communication with the fluid retainer to impart rotational motion thereto.” Nevertheless, the Office has not shown that Lal et al. teach such a limitation. In contrast, on page 3 of the Office Action, the Office states that Lal discloses “reciprocal motion.” Along these lines, it appears that Lal et al. teach using an ultrasonic actuator to selectively drive the inner needle in longitudinal mode vibrations. (*See*

Col. 2, lines 25-28). Thus, the skilled artisan would likely find that Lal et al. do not teach a motion element to impart rotational motion to the fluid retainer.

Because the Office has not shown that Lal et al. teach each and every element recited in amended claims 1, 27, 28, 29, and 30, or the claims that depend therefrom, Applicants respectfully request that this rejection be withdrawn.

§103 Rejection of the Claims

Claims 12-16 are rejected under 35 USC § 103(a) as being unpatentable over Lal et al. in view of McGlothlin et al. (US 5,992,700). However, as previously mentioned, the Office has not shown that Lal et al. teach all elements of claim 1, from which claim 12 and its dependent claims (claims 13-16) depend. Additionally, the Office has not shown that Lal et al. and McGlothlin et al. teach all elements of claim 12.

For example, claim 1 recites “means for imparting motion to the retaining means to, in turn, enhance the evaporation and dispersion of the fluid into the ambient environment.” Claim 12 further states that “the means for retaining the fluid comprises at least one porous member.” While the Office argues that “McGlothlin teaches an infusion device having a porous wick that control [sic] the diffusive transport of the liquid” (Office Action, at page 3), the Office has not shown that either Lal et al. or McGlothlin et al. teach means for imparting motion to the retaining means comprising at least one porous member to enhance the evaporation and dispersion of the fluid into the ambient environment. Indeed, the skilled artisan would find such a teaching is contrary to and incompatible with the teachings of McGlothlin et al.

For instance, McGlothlin et al. teach “Gas is generated at a controlled rate from a liquid and solid phase combination.” (Abstract). McGlothlin et al. further teach that “by using diffusive transport of the liquid toward the solid phase,” the rate of gas generation can be prolonged. (*Id.*). Because McGlothlin et al. seek to diffuse “the liquid to the surface of the solid at a controlled diffusion rate” to generate gas from the liquid and solid phase combination (Col. 2, lines 50-59), the skilled artisan would recognize that McGlothlin et al. teach against enhancing the evaporation and dispersal of the fluid into the ambient environment, which would prevent the fluid in McGlothlin et al. from contacting the solid surface.

Because the Office has not shown that Lal et al. or McGlothlin et al. teach all elements of claim 12 and its dependent claims 13-16, Applicants respectfully request that this rejection be withdrawn.

Claim 31 was rejected under 35 USC § 103(a) as being unpatentable over Lal et al. in view of Schwartz et al. (U.S. 5,092,844). However, as previously mentioned, the Office has not shown that Lal et al. teach all elements of claim 30, from which claim 31 and its dependent claims (claims 32 and 33) depend. Additionally, the Office has not shown that Lal et al. and Schwartz et al. teach all elements of claim 31.

In particular, claim 30 recites “a motion element in communication with the fluid retainer to impart rotational motion thereto and thereby enhance evaporation and dispersion of the fluid to the ambient environment.” Moreover, claim 31 states that “the motion element is a motor.” Although the Office argues that Schwartz et al. “teaches a fluid delivery mechanism that may include a motor for either reciprocal motion . . . or rotational motion to achieve the desired fluid flow” (Office Action, at page 3), the Office has not shown that Schwartz et al. teach a motion element to impart rotational motion to the fluid retainer to enhance evaporation and dispersion of the fluid into the ambient environment. Indeed, the skilled artisan would likely understand that such a teaching is incompatible with the invention in Schwartz et al.

Specifically, Schwartz et al. teach an intracatheter pump apparatus and method for infusing fluid through a lumen of a catheter. (*See* Abstract). In Schwartz et al., the pump comprises a motor and a fluid moving mechanism. (*See* Col. 2, lines 42-48). The fluid moving mechanism is attached, such that when the fluid moving mechanism is moved by an elongated member, the fluid moving mechanism causes longitudinal movement of fluids through the lumen. (*Id.*). The pump can then be used with a balloon catheter to treat a vessel or “in numerous types of treatments in various body vessels in which fluids need to be perfused; e.g., vessels of the urinary tract, lungs, brain, kidneys, liver, etc.” (Col. 5, lines 1-7, emphasis added). Accordingly, the skilled artisan would likely understand that Schwartz et al. teach apparatus and methods for infusing fluids through a lumen of a catheter (*see* Abstract), and do not teach using the motor to enhance evaporation and dispersion of the fluid to the ambient environment.

Indeed, the skilled artisan would likely recognize that evaporating and dispersing the fluid to the ambient environment would render the invention in Schwartz et al. inoperable and/or dangerous.

Because the Office has not shown that Lal et al., Schwartz et al., or the combination thereof teach all elements of claim 31 or the claims that depend thereon, Applicants respectfully request that this rejection be withdrawn.

Conclusion

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney (801-978-2186) to facilitate prosecution of this application.

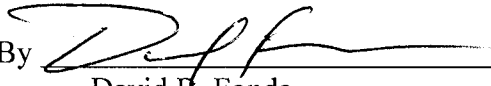
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-3586

Respectfully submitted,

ASHOK V. JOSHI ET AL.

By their Representatives,

Date 8/4/2008

By 
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